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Cont. 1
C1 material; and

d: returning the membrane to ambient temperature.

Claim 16 (amended) The method of claim 12 wherein the

C2 percentage conversion of crystalline material is determined using
X-ray spectroscopy.

Cancel claim 24.

REMARKS

Reconsideration of this application is requested in view of the amendments to the claims and the remarks presented herein.

The claims in the application are claims 12 to 23, all other claims having been cancelled.

Claims 12 to 24 were rejected under 35 USC 112, second paragraph, as being indefinite. The Examiner indicated that there was no antecedent basis for the expression "the elevated temperature" in claim 12 and in claim 6, there was no antecedent basis for the percentage of crystalline phase and claim 17 was objected to as lacking antecedent basis for the intended operating temperature. Claim 24 was deemed to be indefinite as well. The Examiner further objected to claim 12 as being unclear in the operating temperature.

Applicants respectfully traverse this ground of rejection

since the amended claims are believed to properly define the invention. Claim 24 has been cancelled and claim 12 has been amended to provide antecedent basis for the expression "intended operating temperature". Claim 16 has been amended to insert proper antecedent basis for the percentage conversion of crystalline material which is found in claim 12. The expression "elevated temperature" is now recited as "an elevated temperature". With respect to the heating temperature of the membrane being at least 5°C above the operating temperature, this is not indefinite since claim 12 calls for the membrane to be operating at a temperature above 100°C and therefore, at least about 5°C above its operating temperature is more than that and therefore, then claim is clear.

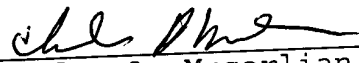
Claims 12 to 24 were rejected under 35 USC 112, first paragraph, as containing new matter in the expression "heating the membrane to a temperature of at least about 5°C above its operating temperature" since this was deemed by the Examiner not to be supported by the application.

Applicants respectfully traverse this ground of rejection since it is deemed that the expression is clearly supported by the application as filed. The operating temperature above 100°C is clearly supported by the specification on page 4 wherein the 100°C threshold is talked about and on page 5, wherein a temperature range of 100° to 160°C for the operation temperature is set forth.

With respect to the "at least 5°C higher than the operating temperature", this is clearly supported by the examples. In Example 1, the membrane is subjected to a "thermal ramp up to 160°C" as can be seen by lines 4 and 5 from the bottom of the page. In Example 3, there is an operating temperature of 155°C and therefore, this supports the temperature treatment of 160°C as being 5°C above the cell operating temperature of 155°C of Example 3. Therefore, it is deemed that claim 12 is properly supported by the application as filed and withdrawal of this ground of rejection is requested.

In view of the amendments to the claims and the above remarks, it is believed that the claims clearly point out Applicants' patentable contribution and favorable reconsideration of the application is requested.

Respectfully submitted,
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CAM:ds
Enclosures



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MARKED UP VERSION OF CLAIMS SHOWING CHANGES MADE

Claim 12 (amended) A method for conditioning a polymeric proton exchange membrane for operation at temperatures above 100°C, the method comprising the steps of:

- a: heating the membrane to a temperature at least about 5°C above its said intended operating temperature;
- b: selecting a desired percentage of conversion of the membrane polymer from an initial amorphous state to a crystalline stage;
- c: holding said membrane at [the] an elevated temperature for a predetermined interval, wherein the predetermined interval has been selected to permit the desired percentage conversion of amorphous to crystalline material; and
- d: returning the membrane to ambient temperature.

Claim 16 (amended) The method of claim 12 wherein the percentage conversion of crystalline [phase] material is determined using X-ray spectroscopy.